U.S. Appln. No. 10/089,168

Attorney Docket No.: Q69109

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of setting up a call matching a predetermined set of requested services and/or characteristics over a network which may optionally be a composite and multi-component network, the method being characterized in that it consists comprising:

in-subdividing said network into a plurality of domains (D1 to DM), with a negotiator unit (Ni) being associated with each domain-(Di); in

sending to at least one negotiator unit (Ni) a request for setting up a call together with a set of parameters defining the services and/or characteristics associated with the call to be set up;

said at least one negotiator unit contacting resources of its domain and contacting negotiator units of other domains requesting available resources in said other domains:

determining and selecting resources, from the resources of said at least one negotiator unit domain and the resources provided by the negotiator units of said other domains, that provide best possible match with said set of services and/or characteristics; and,

where appropriate, in-setting up said call <u>using said determined and selected</u>

<u>resources</u>after determining appropriate available resources (Ri) in the various domains (Di)

concerned and selecting those resources (Ri) that provide the best-possible match with said set of services and/or characteristics.

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2. (currently amended): A method according to claim 1, in which wherein each negotiator unit (Ni) is in communication firstly with:

the various resources (Ri) of a respective domain and service providers in the respective domain (Di) under consideration, whether connected directly or indirectly to said network or forming portions thereof, and secondly with

the negotiator units (N1 to Ni - 1 and Ni + 1 to NM) of the other domains (D1 to Di - 1 and Di + 1 to DM), where each negotiator unit (Ni) evaluating evaluates, selecting selects, and reserving reserves, after reaching an agreement, the resources (Ri) and/or services available in the respective domain (Di) which is associated therewith and making it possible to contributes in optimal manner to setting up the intended call in an optimal manner.

3. (currently amended): A method according to claim 1, eharacterized in that it eonsists: wherein: in sending

said set of requested services and/or characteristics <u>are sent</u> to the negotiator unit (Ni) of each domain (Di) situated along the or any possible transmission path for the call to be set up, or having at least one resource (Ri) which might be involved in said call.

in determining via said negotiator units (Ni) and in each of the above-specified domains, determine which resources (Ri) are available and suitable for contributing to setting up and implementing said call in full or partial compliance with the requested set of services and/or characteristics.

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in collecting and evaluating the information supplied by the addressed negotiator units

(Ni) is collected and evaluated; and

in setting up the call is set up as a function of the results of said evaluation and after

reserving suitable resources (Ri) in the domains (Di) concerned.

4. (currently amended): A method according to claim 1, characterized in that wherein:

the set of services and/or characteristics requested for the call is set by the user (U1) that

initiates the call, and in that

the call setup request and the requests associated therewith are sent to the negotiator unit

(Ni) of the domain (Di) in which the user issues the call request and the associated requests,

which and

the negotiator unit analyzes them the call request and the associated requests and

forwards the call request and the associated requests them to the negotiator units (Ni) that might

become involved in the set up of the call.

5. (currently amended): A method according to claim 1, characterized in that wherein the

resources (Ri) available in the various other domains (Di) are selected from the a group formed

by: transmission network resources; computation and data processing resource; connection

resources; communications protocol resources; data and information playback resources;

database resources or analogous information storage resources; interfacing resources; and other

resources (Ri) depending on each of the negotiator units (Ni) under consideration.

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6. (currently amended): A method according to claim 1, characterized in that wherein the characteristics of the call to be set up are selected from the a group formed by the a destination (U2), the nature and the quality of the call, the duration of the call, the time at which the call is to

be set up if it is to be set in a deferred time, and the maximum cost per unit time, or the like.

7. (currently amended): A method according to claim 1, characterized in that it consists

further comprising in-weighting the various parameters that making make up the set of requested

services and/or characteristics in terms of at least one of importance or and of preference.

8. (currently amended): A method according to claim 1, characterized in that-wherein, if

the negotiator unit (Ni) of the negotiator unit domain, in which or via which the a user (U1) that

issued the call setup request is connected to the network, is not in a position to adequately satisfy

adequately the services and/or characteristics requested by said user-(U1), then it the negotiator

unit submits to said user, for selection and agreement, one or more call setup options

approximately satisfying the set of services and/or characteristics as initially requested, with this

optionally taking place prior to reserving the resources (Ri)-concerned or prior to confirming

such reservation with the negotiator units (Ni) of the resources (Ri) or services concerned.

9. (currently amended): A composite communications network enabling a call to be set

up matching a predefined set of services and/or characteristics required by the initiator of the call

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setup request, the network <u>comprising</u>: <u>being characterized in that said composite network is</u>

made up of

a plurality of domains-,

wherein (D1 to DM) each of said plurality of domains which is associated with a corresponding negotiator unit-(Ni),

wherein each of the negotiator unit units being capable of communicating communicates
with: firstly with the

various communications and service resources (Ri) forming part of or connected to the a domain (Di) of the respective negotiator unit-(Ni), and secondly

with the negotiator units (N1 to Ni - 1 and Ni + 1 to NM) of the other domains (D1 to Di - 1 and Di + 1 to Dm) making up said composite network,

wherein said domains (Di) being are interconnected via appropriate interfaces.

10. (currently amended): A network according to claim 9, eharacterized in that-wherein each domain (Di) constitutes a structurally and/or logically unitary entity, for example such as a homogenous network and the service providers connected thereto, and wherein the associated negotiator unit (Ni) being formed by or forming part of the a server, or a similar managing computer unit, that controls or drives said unitary entity.

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11. (currently amended): A network according to claim 9, characterized in that it is constituted by the further comprising an Internet, and wherein the network in that it implements the method according to any one of claims 1 to 6 comprising:

sending to at least one negotiator unit a request for setting up a call together with a set of parameters defining the services and/or characteristics associated with the call to be set up;

said at least one negotiator unit contacting resources its domain and negotiator units of other domains requesting available resources in said other domains;

determining and selecting resources, from the resources of said at least one negotiator unit domain and the resources provided by the negotiator units of said other domains, that provide best possible match with said set of services and/or characteristics; and

setting up said call using said determined and selected resources, on any request from a user (U1) of any one of its component domains (Di) in order to set up a call between said user and the desired destination(s) (U2) and/or to supply the requested service(s).

- 12. (currently amended): An optionally mobile terminal, characterized by the fact that it forms forming a portion of the a network according to claim 9.
- 13. (new): The network according to claim 10, wherein said unitary entity is a homogenous network having service providers connected thereto.